## Work Order ID 122289

\*122289\*

Page 1

Monday, July 14	, 2014 1:55:08 PM		"   / /	//XY"					Page 1
Revision ID:	D3573-1 Adapter	,	Accept	*N900	0040100	)* ፡	Setup Sta Sto	ı u.	S1* S2*
Start Date: Required Date: Reference:	7/14/14 Start Qty: 4.00 7/14/14 Req'd Qty: 4.00	*4* *4*	*	Cust Item Customer:				I VI	
Approvals:	Process Plan: _ 州しづQC:	Date: 14-07-15	Tooling: SPC (Y/N):	<u>""</u>	Date:	I	Run Sta Sto	~1/1	R1*
Sequence ID/ Work Center ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool # Plan	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr			<i>:</i>					
D3573	Rev A				San State of		· .		·
*1 nn* Bandsaw Jeaspa Bandsaw	BAND SAW  Memo  Cut blank 3	.500" long	0.00			4	Ð		DAS 20 9-89 14-07-23 DAS
*110 *110* HAAS 1 HAAS CNC vertical	HAAS CNC VERTICAI  Memo  machine #1 Machine as	L MACHINING #1  per Folio FA672 and Dwg l	0.00 0.00 D3573			4		:	25   4-7-2 20 9-89   4-07-2
120 *1 20* QC Quality Control	QC2- Inspect parts off m  Memo	nachine FAI/FAIB	0.00			4			DAS 25 147-24 3-89

DQA:			Date:						DA 4 A A ( C						<b>DART</b>
QA Closed:			Date:			WORK ORDER NON-	-CC	JNFO	RIVIANCE / UF	DATE	W	ork Order up	odate only		AEROSPACE
-						DISPOSITION				AGAINST	DE	PARTMENT	/PROCESS		
Work Orde	er:		-			Rework	. 1		Skid-tube	Crosstube	Г	1	Water Jet	٦	Engineering
Part N	ام					Scrap			Machining	Small Fab	-	Pro	d. Eng. Coor.	ᅦ	Quality
raitiv	٠					Use-as-is			noforming	Finishing	<u> </u>	4	re/Packaging	┨	Other
NCR N	lo.				<del></del>	Suspected Unapproved		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Large Fab	Composite	_	]	Supplier		
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Root		_			Desc	ription of work order update	1	Initial	Acti	į.		Sign &	Verification		QC Inspector
Cause	_	Date	Step	Qty		or non-conformance	Ch	ief Eng	Descr	iption		Date	verincation	Ή	QC IIIspector
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Unapproved													,,,,,		
20		<u> </u>	<del></del>	<u> </u>			FA	ULT CA	TEGORY						·
Landii	ng (	Gear				General						_	_		
		Bending				Bend		Folio/l	Program	1	L	Outside Dim	ensions		Pressure/Forced
		Centre No	ot Concer	ntric		BOM/Route		Grain		l		Over/Under	tolerance	-	Set-up
		Cracks				Broken/Damage/Defect		Hardwa	are	1	L	Part Incorre			Temperature/Cure
		Crimp/Kir	nk/Ripple	/Wave		Burrs	L	Inspect	tion Incomplete/Un	qualified	L	Part Lost/Mi	issing	_	Weld
£1. 1		Cuffs				Contamination		-	tions Incomplete/U	İnclear	lacksquare	Part Moved	Ĺ		Wrong Stock Pulled
25 27.0		Crushing				Countersink		Misali	gned/off center		<u></u>	Positioned V			
P5-01		Heat Trea	at			Cut Too Short		Mislab				Power Loss/	/Surge		Other
		Inspection	n Strip in	Tube		Drawing	<u></u>	Misrea	ıd i						
		Marks/Ch	natter			Drill Holes		Off-set	f.						
		Turning S	equence			Finish		<b>-</b> ∤	Calibration						
1			ist in Tuk	16		Fit/Function	1	Out of	Sequence						

Work Ore				*122	2289*							Page
Item ID: Revision ID: Item Name:	D3573-1 Adapter			Accept	*N900	<u>040</u>	100	)*	-	tart Stop		S1* S2*
Start Date: Required Dat Reference:	7/14/14 e: 7/14/14	Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*		Cust Item I Customer:	ID:						
Approvals:	Process Pl	an:	Date:	Tooling: SPC (Y/N):		ate:				tart Stop		R1* R2*
Sequence ID/ Work Center	ID	Operation Description QC8- Inspect parts - sec	ond check	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty		keject lumber	Insp. Stamp

140

Chemical Conversion Coat per QSI005 4.1

0.00

0.00

\*140\* HandFinish Hand Finishing

\*1.30\*

Quality Control

Memo

Memo

0.00

4 7/6,14-7.24

150

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00

\*150\* Powdercoat

125028

Powder Coating

Memo

0.00

5'.00 OVEN TEMPERATURE: 5:30

DQA:			Date:						_					*DART
						WORK ORDER NON-	-CC	ONFO	RMANCE / UF	PDATE			–	AEROSPACE
QA Closed:			Date:			·					W	ork Order up	odate only	
Work Orde	ar.					DISPOSITION				AGAINST	DE	PARTMENT	/PROCESS	
WOIK OIGE	٠.					Rework	ı		Skid-tube	Crosstube			Water Jet	Engineering
Part N	lo.					Scrap			Machining	Small Fab		Pro	d. Eng. Coor.	Quality
	•					Use-as-is		Therr	moforming	Finishing		Rec/Sto	re/Packaging	Other
NCR N	۱o.					Suspected Unapproved			Large Fab	Composite			Supplier	
Root					Desc	ription of work order update	Н	nitial	Acti	ion		Sign &	****	
Cause		Date	Step	Qty	Desc	or non-conformance	1	ief Eng				Date	Verification	QC Inspector
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							FA	ULT CA	TEGORY					
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		Bending			<u> </u>	Bend	<u> </u>	4	Program	r	_	Outside Dim		Pressure/Forced
į. ·		Centre No	ot Concer	ntric	<u> </u>	BOM/Route	<u> </u>	Grain			-	Over/Under	<u> </u>	Set-up
,	<u> </u>	Cracks				Broken/Damage/Defect	<u> </u>	Hardwa			-	Part Incorre	<del>  -</del>	Temperature/Cure Weld
	<u> </u>	Crimp/Kii	nk/Ripple	/Wave	<u> </u>	Burrs		4	ion Incomplete/Un		┝	Part Lost/M	issing	Wrong Stock Pulled
	$\vdash$	Cuffs			<u> </u>	Contamination	<u></u>	4	tions Incomplete/U	inclear		Part Moved	L.	TAALOUR STOCK Laulen
	<u> </u>	Crushing			-	Countersink	-	-	gned/off center		$\vdash$	Positioned V Power Loss/		Other
		Heat Trea			<u> </u>	Cut Too Short	$\vdash$	Mislab	,		<u> </u>	Jeower Loss/	onige [	Totalei
	<u> </u>	Inspectio	-	Tube		Drawing	$\vdash$	Misrea						
	_	Marks/Ch			<u> </u>	Drill Holes	-	Off-set	1				-	
		Turning S			<u> </u>	Finish	$\vdash$	4	Calibration					
l	l	Wave/Tw	ist in Tut	эe		Fit/Function	1	[Out of	Sequence					

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<b>122289</b> 55:08 PM		*12	2289*				Page 3
		Accept	*N900	<b>04010</b>	<b>n</b> * <sup>s</sup>	Setup Start	
Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*		Cust Item I Customer:	D:			
	Date:	Tooling: SPC (Y/N):			F	Run Start Stop	"NHI"
Operation Description QC3- Inspect Part Finish Memo		Set Up/ Run Hour® 0.00  0.00	Tool ID	Tool # Plan Code	Accept Qty	Reject Qty	Reject Insp. Number Stamp
Identify as per dwg & Sto	ock Location: <u>6.4</u>	0.00		·	_4x	DAS 28 	JUL 2 8 2014
QC21- Final Inspection -  Memo	Work Order Release	0.00				14	1/7/28 /
	Start Qty: 4.00 Req'd Qty: 4.00  Plan:  Operation Description QC3- Inspect Part Finish  Memo  Identify as per dwg & Sto Memo	Start Qty: 4.00 *4* Req'd Qty: 4.00 *4*  Plan: Date: Date:  Operation Description QC3- Inspect Part Finish  Memo  Identify as per dwg & Stock Location: 64  Memo  QC21- Final Inspection - Work Order Release	Start Qty: 4.00 *4* Req'd Qty: 4.00 *4*  Plan: Date: Tooling:	Accept	Accept	Accept	Accept

DQA:			Date:							1			TOART
QA Closed:			Date:			WORK ORDER NON-	·CC	ONFO	RMANCE / UF		ork Order up	odate only	AEROSPACE
Qrt closed.			- Date.								· · · · · · · · · · · · · · · · · · ·		
Work Orde	er:					DISPOSITION				AGAINST DE	:PAKTIVIENT, -	/PROCE33	
	•					Rework			Skid-tube	Crosstube		Water Jet	Engineering
Part N	lo.					Scrap		- 1	Machining	Small Fab	-∤	d. Eng. Coor.	Quality
						Use-as-is			noforming	<sup>1</sup> Finishing	Rec/Sto	re/Packaging	Other
NCR N	Ю.			***		Suspected Unapproved			Large Fab	Composite	_	Supplier	
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Root		Date	Step	Qty	Desci	or non-conformance	ĺ	ief Eng	Descri	1	Date	Verification	QC Inspector
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Landi	ng (	1			_	General		1 /=		ļ <u>—</u>	]		Pressure/Forced
		Bending			<u> </u>	Bend	├-	1	Program	-	Outside Dim	<u> </u>	Set-up
		Centre No	ot Concer	ntric	-	BOM/Route		Grain		! <u> </u>	Over/Under Part Incorre	<del> </del>	Temperature/Cure
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H:/FORMS/Quality Assurance\approved QA/NCRWO RevH

Picklist Print

Monday, July 14, 2014 1:55:08 PM

Work Order ID: 122289

\*122289\*

Parent Item:

D3573-1

\*D3573-1\*

Parent Item Name: Adapter

**Start Date: 7/14/14** 

Required Date: 7/14/14

Page 1

Start Qty: 4.00

Required Qty: 4.00

Comments:

IPP Rev:A New Issue 07-01-29 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Primary Item Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B0.625X02.50 0		Purchased	No		100	f	5.0000	0.292	1.229474	1		

\*M6061T6B0 625X02 500\*

6061-T6 Bar .625 x 2.50

Location Loc Qty Loc Code MAT002 5

5

M128865

1.233

1.233'

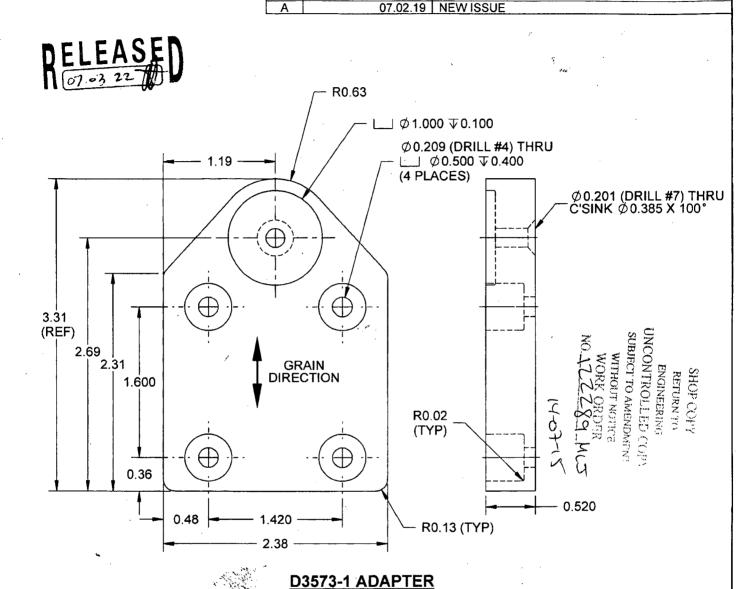
DQA:			Date:											<b>DART</b>
						WORK ORDER NON	-CC	ONFO	RMANCE / UI	PDATE			–	AEROSPACE
QA Closed:			Date:								W	ork Order up	date only	
34/ - ul. Oud.						DISPOSITION				AGAINST	DE	PARTMENT	/PROCESS	
Work Orde	er:	· · · · · · · · · · · · · · · · · · ·		<del></del>	_	Rework	ı İ		Skid-tube	Crosstube	Г	1	Water Jet	Engineering
Part N	ما					Scrap	1		Machining Machining	Small Fab		Pro	d. Eng. Coor.	Quality
raiti	١٠٠.	<del></del>				Use-as-is	1 1		noforming	Finishing		4	re/Packaging	Other
NCR N	No.					Suspected Unapproved	1		Large Fab	Composite	-	1	Supplier	1   1
	•				_	· · · · · ·	1					<u> </u>		
Root					Desci	ription of work order update		nitial	Act	ión		Sign &	" "	
Cause	,	Date	Step	Qty		or non-conformance	Ch	ief Eng	Descr	iption		Date	Verification	QC Inspector
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Operator														
Offset/Setup				<b>.</b>						1				
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Unapproved			<u> </u>	<u> </u>			<u> </u>	ULT CA	TEGORY	1		<u> </u>	<u></u>	<u></u>
						General	FA	OLI CA	TEGORT	<u> </u>		<del></del>		
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:	_	Bending Centre No	ot Concor	atric	-	BOM/Route		Grain	rogram		-	Over/Under	<del>-</del>	Set-up
		Cracks	of Concer	ittic	├	Broken/Damage/Defect	$\vdash$	Hardwa	are	1	H	Part Incorre	<u> </u>	Temperature/Cure
		Crimp/Kir	nk/Rinnle	/\/\ave		Burrs	$\vdash$	4	tion Incomplete/Ur	i igualified	$\vdash$	Part Lost/M	<b>—</b>	Weld
		Cuffs	іку пірріс	,, wave		Contamination		4 '	tions Incomplete/l	1		Part Moved	Ī	Wrong Stock Pulled
·		Crushing			-	Countersink		4	gned/off center	!		Positioned V	∟ Vrong	
	$\vdash$	Heat Trea	nt			Cut Too Short		Mislab		1	Г	Power Loss/	Surge	Other
		Inspectio		Tube		Drawing		Misrea				<b>-</b>		
		Marks/Ch	-			Drill Holes		Off-set						
		Turning S				Finish		Out of	Calibration	!				
1	Г	Wave/Tw				Fit/Function		Out of	Sequence					

DART AEROSPACE LTD	Work Order: \	22289
Description: Adapter	Part Number:	D3573-1
Inspection Dwg: D3573 Rev: A		Page 1 of 1

( <u>.</u>			••, •					age 1 of 1
		FIR	ST ARTICLE		ION CI	HECKLIST		
		L	X First Ar	ticle	Pro	ototype		
D	rawing	<b>T</b> -1	Actual			Method	of _	
Din	nension	Tolerance	Dimension	Accept	Rejec	Inspecti		omments
	3.31	+/-0.030	3.310			1/852	21-1	0
	2.69	+/-0.030	2.6.59			~		
	2.31	+/-0.030	2.310			~		
	1.600	+/-0.010	1-600			-		
	0.36	+/-0.030	-357			^		
	1.19	+/-0.030	1-188			H-G		
	2.38	+/-0.030	2.375			Vern	ا-اد	
	1.420	+/-0.010	1.420			2		
	0.48	+/-0.030	489					
F	R0.63	+/-0.030	- 63					
F	₹0.13	+/-0.030	.13					, , , , , , , , , , , , , , , , , , , ,
F	₹0.02	+/-0.030	,0/5					
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Q	0.201	+0.005/-0.001	-201					
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							-	
				DAS	······			
Meas	ured by:	<u> </u>	Audited by:	44 9-89		Prototype	Approval:	N/A
	Date:	14.7-24 14.7-24	Date:	14/07/	24	Ĺ	Date:	N/A
Rev	Date	Change					Revised by	Approvéd
Α	07.04.04	New Issue					KJ/JLM	



	DESIG	DESIGN DRAWN BY		DART AEROSPA HAWKESBURY, ONTARK	
	CHECK	KED PH	APPROVED.	DRAWING NO.	REV. A SHEET 1 OF 4
,	DATE	07.0	2.19	ADAPTER	SCALE 1:1
	REV		DATE	DESCRIPTIO	N



1) MATERIAL: 6061-T6 (OR T651/T6510/T6511/T62) ALUMINUM BAR

PER QQ-A-225/8 OR QQ-A-200/8 OR AMS 4117/4128/4115/4116 OR AMS 4160

(REF DART SPEC M6061T6B)

2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

POWDER COAT "GREY SANDTEX" (4.3.5.6) PER DART QSI 005 4.3

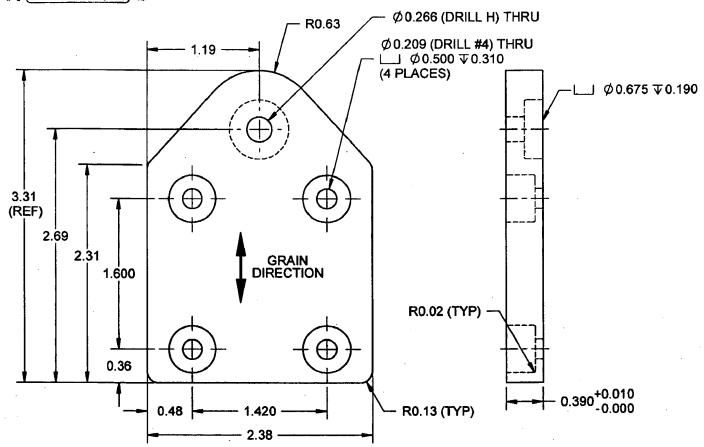
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

4) IDENTIFY WITH DART P/N "D3573-1" USING FINE POINT PERMANENT INK MARKER 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX





DESIGN	DRAWN BY		OSPACE LTD ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.	REV. A
PH	H	D3573	SHEET 2 OF 4
DATE		TITLE	SCALE
07.0	2.19	ADAPTER	1:1



## **D3573-3 ADAPTER**

NOTES: 1) MATERIAL: 6061-T6 (OR T651/T6510/T6511/T62) ALUMINUM BAR

PER QQ-A-225/8 OR QQ-A-200/8 OR AMS 4117/4128/4115/4116 OR AMS 4160

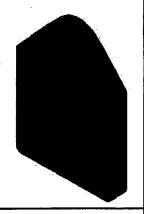
(REF DART SPEC M6061T6B)

2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

POWDER COAT "GREY SANDTEX" (4.3.5.6) PER DART QSI 005 4.3

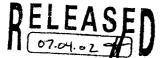
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

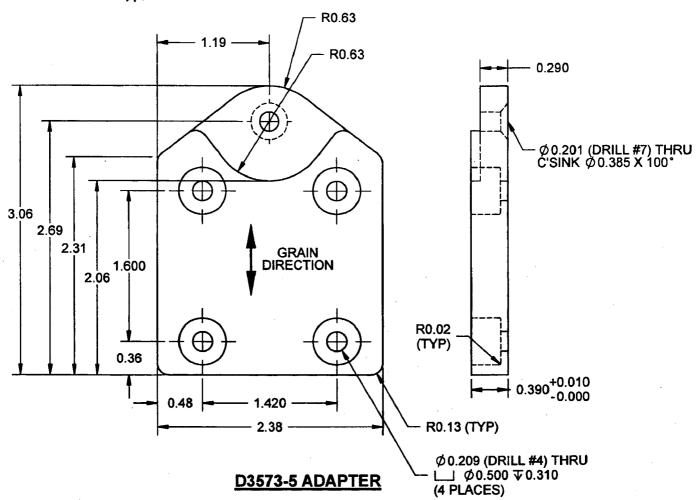
4) IDENTIFY WITH DART P/N "D3573-3" USING FINE POINT PERMANENT INK MARKER 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX





-	DESIGN DRAWN BY		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
	CHECKED	APPROVED	DRAWING NO.	REV. A
	PH		D3573	SHEET 3 OF 4
	07.02.19		TITLE	SCALE
			ADAPTER	1:1





NOTES: 1) MATERIAL: 6061-T6 (OR T651/T6510/T6511/T62) ALUMINUM BAR

PER QQ-A-225/8 OR QQ-A-200/8 OR AMS 4117/4128/4115/4116 OR AMS 4160

(REF DART SPEC M6061T6B)

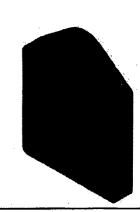
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

POWDER COAT "GREY SANDTEX" (4.3.5.6) PER DART QSI 005 4.3
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

4) IDENTIFY WITH DART P/N "D3573-5" USING FINE POINT PERMANENT INK MARKER
5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX



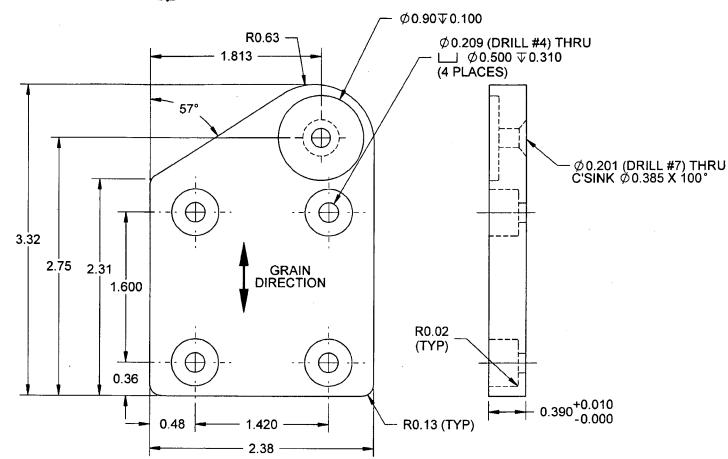
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	DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
	CHECKED	APPROVED	DRAWING NO.	REV. A
	PH	-#	D3573	SHEET 4 OF 4
	07.02.19		TITLE	SCALE
			ADAPTER	1:1





## **D3573-7 ADAPTER (SHOWN)** D3573-8 ADAPTER (OPPOSITE)

NOTES:

1) MATERIAL: 6061-T6 (OR T651/T6510/T6511/T62) ALUMINUM BAR

PER QQ-A-225/8 OR QQ-A-200/8 OR AMS 4117/4128/4115/4116 OR AMS 4160 (REF DART SPEC M6061T6B)

2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

POWDER COAT "GREY SANDTEX" (4.3.5.6) PER DART QSI 005 4.3
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

4) IDENTIFY WITH DART P/N "D3573-7/-8" USING FINE POINT PERMANENT INK MARKER 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX



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